

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference AA 1166	FOR FURTHER ACTION <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. PCT/FI 2005/000009	International filing date (day/month/year) 7 January 2005	(Earliest) Priority Date (day/month/year) 17 February 2004
Applicant FINNKETJU INVEST OY et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 2a

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/FI 2005/000009**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-10 in part
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

see next sheet
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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International application No.
PCT/FI 2005/000009

The present claims 1-10 relate to a scraper comprising an elongated, at least tension transmitting flexible structure, formed of formed pieces. However, the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT, only for a scraper meant to be used for scraping of substance in a liquid basin e. g. to a surface or a bottom chute by means of a scraper bar arrangement moving in the liquid basin.

Consequently, the search performed has been targeted to cover the embodiments described in the application, but has also included scraper conveyors. The search has thus been focused on a scraper meant to be used for scraping of substance in a liquid basin e. g. to a surface or a bottom chute by means of a scraper bar arrangement moving in the liquid basin.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2005/000009

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B01D 21/18, B01D 21/06 // F16G 13/10, B65G 19/20
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B01D, F16G, B65G, E02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1755680 A (N.D. LEVIN), 16 Sept 1930 (16.09.1930), whole document	1,5-8
Y	--	2-3
Y	WO 0228750 A1 (MORRIS, RANDALL, LEE), 11 April 2002 (11.04.2002), page 5, line 27 - page 7, line 9, figures 2-3,17	2-3
A	FI 100322 B (FINNKETJU INVEST OY), 14 November 1997 (14.11.1997), abstract	9-10
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

20 May 2005

Date of mailing of the international search report

24 -05- 2005

Name and mailing address of the ISA/
Swedish Patent Office
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2005/000009

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 0170603 A1 (FINNKETJU INVEST OY), 27 Sept 2001 (27.09.2001), whole document --	1
A	GB 378890 A (WILLIAM WARREN TRIGGS), 15 August 1932 (15.08.1932), whole document --	1
A	US 5031752 A (TEJA ROSTOWSKI ET AL), 16 July 1991 (16.07.1991), whole document -- -----	1

INTERNATIONAL SEARCH REPORT
Information on patent family members

01/04/2005

International application No.

PCT/FI 2005/000009

US	1755680	A	16/09/1930	NONE		
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WO	0228750	A1	11/04/2002	AU	9680601 A	15/04/2002
				ZA	200302433 A	02/09/2004
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FI	100322	B	14/11/1997	FI	962392 D	00/00/0000
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WO	0170603	A1	27/09/2001	AT	269828 T	15/07/2004
				AU	4072001 A	03/10/2001
				CN	1419516 A,T	21/05/2003
				DE	60103987 D	00/00/0000
				EP	1268325 A,B	02/01/2003
				FI	106947 B	00/00/0000
				FI	20000667 D	00/00/0000
				US	20030029791 A	13/02/2003
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GB	378890	A	15/08/1932	NONE		
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US	5031752	A	16/07/1991	AU	619072 B	16/01/1992
				AU	4798490 A	27/09/1990
				DE	3909309 A,C	27/09/1990
				DE	3943624 C	04/02/1993
				ZA	9000147 A	31/10/1990
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